## **Decision Memo**

Chintilly 2 Prescribed Burning

Chattahoochee-Oconee National Forest-Chattooga River Ranger District-Rabun County, Georgia

#### 1. DECISION

I have decided to approve the proposal to prescribe burn approximately 230 acres (refer to attached project descriptions and area maps) of National Forest System lands on the Chattooga River Ranger District of the Chattahoochee National Forest.

This proposed burning will be conducted during the growing season (approximately from April – mid-June and September – mid-October) on a rotation of approximately 3-5 years. Although these months are not all inclusive of the entire growing season in this area, these months were chosen to avoid impacts to the eastern small footed bat (a Regional Forester Sensitive Species) which may have a maternity colony in the vicinity of the project area.

This burn unit will be ignited using hand held drip torches as the ignition devices. Ignition will take place on ridge tops and the fire will be allowed to back down north facing slopes, and into riparian areas, thereby reducing the fire intensity in these areas. Control lines that are uphill from the fire will be fired by hand to ensure the fire does not overrun and cross the control lines. A portion of the control line will include dozer blading on an existing closed road. The bladed lines will be rehabilitated in several ways after the burn is completed, including:

- (1) Water diversions or water "bars" will be installed, during construction, on all dozer blade lines exceeding 3 percent slope. Depending on slope percent, water bars will be placed from 30 to 250 feet apart. Water bars will be installed using Georgia Best Management Practices (*GABMP*), which are found on pages 27 and 37 of the BMP handbook (*Forest Plan, Standard FW-205*). (*Concern of Rabun County Coalition, 7/24/07*)
- (2) After the burns are declared 'out', the dozer blade lines will be rehabilitated using a dozer blade to pull bladed debris back into the lines, which in turn will help speed up the recovery and decrease the visual impacts of the lines (Concern of GA Forest Watch, 8/17/2007).
- (3) All lines will be re-vegetated in the spring using a non-invasive grass mixture best suited to the area and beneficial to wildlife. (BMP, p. 42).
- (4) All dozer constructed bladed lines and dozer bladed lines located on old existing closed roads will be closed using the tank trap method of closure. They will also have snags, dead fall, brush, or in some cases, trees cut or pushed into them parallel at their entrance points with open Forest Service roads to discourage illegal ATV use. (*Concern of Georgia Forest Watch*, 8/17/07)

Additional important mitigation measures include but are not limited to the following:

- ❖ Handlines will be utilized in place of dozer lines near creeks and streams. (Forest Plan, Standards 11-032 and 11-033: BMP,p. 11 &12 trout streams). These lines will be rehabilitated using the same method as the dozer lines, raking forest floor litter back into the control line.
- ❖ Prescribe fire will only be applied under an approved burning plan to meet specific resources objectives, and under supervision of a qualified burning boss. The burning plan will plot the trajectory of the smoke plume, identify smoke-sensitive areas, predict fire behavior, and set parameters for burning conditions to minimize risk of resource damage or fire escape. Burns will not be employed if the smoke plume will impact a smoke-sensitive area, or when the mixing heights is less than 1,640 feet (500 meters) and transport wind speed is less that 9 mph (4 meters/second).
- ❖ To control fire intensity, prescribed burns are implemented under specific fuel and weather conditions. (Concern of Rabun County Coalition, 7/24/207). Burning is scheduled when the KDBI drought index is 450 or less, when fine fuel moisture is between 7 and 15 percent, when relative humidity is higher than 25 percent, when air temperature is less than 95 degrees and the 20 foot wind speed is less than 18 mph.
- The prescribe burning will be conducted to minimize visual impacts along Sarah's Creek Road and in the Sarah's Creek Camp ground. This will include modifying firing methods (backing, flanking, spot firing versus head firing) to burn areas near Sarah's Creek Road with less intensity, reducing the size of trees top killed and lowering the scorch height on roadside trees.
- ❖ In the event that historic or prehistoric cultural resources are discovered during the construction of control lines, work within the immediate vicinity of the discovery will stop and the Forest Archaeologist will be notified.
- ❖ Prescribe burning in this project is scheduled to exclude burning and subsequent harm to the young eastern small-footed bats during their non-volant period of mid-June through August. Note: this is a precautionary measure, biologists are uncertain if a maternity colony is present within or directly adjacent to the burn unit.
- ❖ Burn plans will be reviewed by the District Wildlife Biologist prior to implementation to ensure that all protective measures are in place and to discuss any new information that has surfaced between the planning and implementation stages.

### 2. PURPOSE AND NEED

This project provides an opportunity to work toward the desired future condition of the Forest as described in the Chattahoochee-Oconee National Forests Land and Resource Management Plan (Forest Plan) and it's Final Environmental Impact Statement (FEIS). This prescribed burn is designed to move the burn area closer to meeting the goals and objectives set forth in the Forest Plan.

Specifically, this project will help meet Goal 3 in the Forest Plan (page 2-6) by restoring a disturbance-dependent oak-pine woodland ecosystem. This project will contribute directly to meeting Objective 3.4, (page 2-6) by periodically providing a disturbance in the form of prescribed burning. Burning is an important tool that can be used to restore woodland communities (FEIS, pages 3-131 to 133). Tree species that would flourish in this type of habitat includes pitch pine, shortleaf pine, chestnut oak, scarlet oak, white oak, and southern red oak, all of which currently exist on the site (see project file). In addition, this prescribed burning will control and/or reduce the density of fire-intolerant species, resulting in more sunlight reaching the ground and, thus provide forbs, grasses and shade intolerant trees the opportunity to

grow (FEIS, page 131). Fire-intolerant tree species include white pine, red maple, flowering dogwood, yellow poplar, blackgum, and sourwood.

In addition to the main objective, this project will also decrease heavy fuel loads that have accumulated from years of fire exclusion (Goal 58, Objective 58.3), and increase herbaceous abundance and diversity that will enhance browse and increase the amount of fruits and soft mast available to wildlife (Goals 2 and 4, pages 2-5 through 2-6). (Concern of Rabun County Coalition, 7/24/07) It will create visual appeal by eliminating large piles of slash remaining after the removal of hazard and wind damaged trees.

This project takes place mostly in Management Prescription (MP) 7.E.2, Dispersed Recreation Areas with Vegetation Management - these areas receive moderate to high recreation use and are managed to improve the settings for non-formal outdoor recreation in a manner that protects and restores the health, diversity and productivity of the watershed where the areas are located. Emphasis in this area is to maintain the long-term goals of a diverse and vigorous forest for scenery, recreation, and wildlife (*Forest Plan, page 3-126*). As described above, this project will help enhance the diversity of foods and habitat for wildlife species and will rehabilitate some conditions remaining from past insect epidemics (*Forest Plan, page 3-127*).

A small portion of the project will take place within MP 11, Riparian Corridors, where management is to retain, restore and/or enhance the inherent ecological processes and functions of the associated aquatic, riparian, and upland components. Within the riparian corridor, vegetation management activities including prescribed fire may take place to: maintain, restore, and/or enhance the diversity and complexity of native vegetation. Low intensity fire may occur when streams are used as natural fire breaks. (*Forest Plan, pages 3-171 through 172*).

#### 3. REASONS FOR CATEGORICALLY EXCLUDING THE DECISION

I have determined that this action falls within Category #6 ("Timber stand and/or wildlife habitat improvement activities which do not include the use of herbicides or do not require more than one mile of low standard road construction.") of Forest Service Handbook (FSH) 1909.15, Section 31.2 for categorical exclusions. These actions have been determined by the Chief of the Forest Service to have no significant effect on the quality of the human environment, either individually or cumulatively, and are therefore categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA).

#### 4. FINDING OF NO EXTRAORDINARY CIRCUMSTANCES

Based on interdisciplinary team findings, I have determined that no extraordinary circumstances exist that could cause the actions involved with prescribed burning to have significant effects. The following were considered in the decision making process:

The following table was taken from the Biological Evaluation (BE) prepared by the District Wildlife Biologist. This table contains a summary of the "determination of effects" for those Proposed, Endangered, Threatened and Sensitive (PETS) species which are known to occur or have potential to occur in the project area. Regarding the Diana Fritillary Butterfly, the BE states "A major factor in the Diana's rarity is due to programs of gypsy moth eradication, and not due to

any lack of nectar plants or violets for the larvae (NatureServe 2007). This project may directly impact individuals and cause a decrease in larval habitat and nectar producing plants for the remainder of the growing season following the burn (short-term). However, in the long-term, this project will in fact go on to increase herbaceous diversity, including nectar plants, thus creating additional suitable habitat for this species. Given the design of this project, it is anticipated this project will likely provide long-term benefits for this species for at least 10 years. Therefore, this project may impact individuals but not likely to cause a trend to federal listing or a loss of viability." The complete BE with further information is located in the project file.

Common Name	Scientific Name	Species Status P/E/T/S	Determination of Effect
Rafineque's Big-eared Bat	Corynorhinus rafinesquii	S	No Impact
Eastern Small-footed Myotis	Myotis leibii	S	No Impact
Diana Fritillary Butterfly	Speyeria diana	S	May Impact Individuals But Not Likely To Cause A Trend In Federal Listing Or Loss Of Viability
Margarita River Skimmer	Macromia margarita	S	No Impact
Appalachian Snaketail	Ophiogomphus incurvatus	S	No Impact
Edmunds Snaketail	Ophiogomphus edmundo	S	No Impact
Georgia Beloneurian Stonefly	Beloneuria Georgiana	S	No Impact

- This action complies with the National Historic Preservation Act. (see project file)(Concern of Georgia Forest Watch and Rabun County Coalition, 8/17/07; 7/24/07)
- This action will not affect wetlands, floodplains, steep slopes, erosive soils, or municipal watersheds. (Concern of Rabun County Coalition, 7/24/07). The areas will be ignited using a backing, low to moderate intensity fire that will remove a small amount of the leaf layer (typically ½" or less) leaving the humus and upper soil layers unburned and thereby not fully exposing the soil or heating the soil surface sufficiently to harm valuable soil minerals or organisms. Nitrogen will be lost from the forest floor due to volatilization, but is only temporary as nitrogen-fixing soil microorganisms replace soil nitrogen rapidly. Calcium and phosphorus are also lost but are partially leached into the mineral soil, and remain in the ecosystem. Under burns, such as this prescribed burning project, will cause negligible amounts of erosion. Low-intensity fire with generally less than two-foot flame lengths will be allowed to back into the riparian area along streams (Concern of Rabun County Coalition 7/24/07). In most cases, unburned strips will be left along streams to improve conditions with respect to fisheries and to aid in reducing soil loss and sedimentation (Williams, Edward B., Fire in the Management of Forests of the Southern Region, 1977, p. 15). Minimal erosion will cause very little sedimentation, so there will be little to no affect on water quality in the immediate area or downstream. No roads will be constructed as part of this project.
- This prescribed burn area is not within any congressionally designated areas, such as wilderness, wilderness study areas, National Recreation Areas, Research Natural Areas, or current inventoried roadless areas. This project borders the Sarah's Creek Roadless Area, but clearly will not have

any impacts to the roadless character of the area (map of Sarah's Creek Roadless Area can be found in the project file).

• State-approved Best Management Practices will be met and this project will comply with the Clean Water Act. (Concern of Rabun County Coalition, 7/24/07)

## 5. FINDINGS REQUIRED BY OTHER LAWS

As required by the National Forest Management Act of 1976, I have determined that this action is consistent with the Chattahoochee-Oconee Land and Resource Management Plan (Forest Plan 2004). It adheres to applicable standards and monitoring requirements in the Forest Plan, which includes the soil and water protection measures.

This project follows the Forest-wide and Management Prescription (MP) standards as mentioned above. Specifically:

- □ This prescribed burn is consistent with the desired conditions for the specific MP's within the project area, and will help meet specific goals and objectives established for MP 7.E.2 and 11. This involved an analysis of effects in relation to those expected by the Forest Plan. Refer to page 2 where the purpose and need for the project was examined in relation to the effects from the project.
- This prescribed burning project was chosen after considering economic and environmental aspects of various renewable resources and protection of forest resources to provide for outdoor recreation, range, timber, watershed, wildlife and fish. These resource values are discussed throughout the DM.
- □ This project will provide for diversity of plant and animal communities based on the suitability and capability of the land area in order to meet the overall multiple-use objectives. See the purpose and need for the project on pages 2-3.
- □ This project will not produce substantial and permanent impairment of site productivity and will ensure conservation of soil and water resources. See burning restrictions and mitigation measures outlined on pages 2-5. (Concern of Rabun County Coalition, 7/24/07)

#### 6. PUBLIC INVOLVEMENT

Scoping both internally and externally has not indicated that extraordinary circumstances exist that might cause this action to have significant effects on the environment (FSH 1909.15, Section 30.3-3).

Internal scoping began for this project in October, 2006. On July 19<sup>th</sup> 2007 public scoping was initiated by mailing out 88 letters to interested individuals, organizations or agencies who have indicated an interest in projects on this district. This initial scoping included a description of the proposed action and detailed map showing the areas considered for burning, fireline construction needed, and existing natural firebreaks

Five (5) responses were received from the initial scoping letter. Three (3) letters supported the prescribed burning project with no concerns or comments; one (1) supported the project with several comments and concerns, and one letter included several concerns. Concerns are responded to within this decision and a "Response to Comments" document has been prepared (project file). The list of people receiving the scoping letter is located in the project file.

#### 7. MONITORING

Before, during, and after the implementation of the burn, several aspects of this project will be monitored to determine whether the project is carried out as designed, and whether the effects to the environment are as predicted in this decision.

Monitoring will provide feedback that may lead to modifications, corrections, or supplements, to this decision (see Forest Service Handbook (FSH) 1909.15, Chapter 18), and will provide important information for future prescribed burning projects. Some important monitoring that will be done under this project is listed below:

- □ Post burn evaluations will be conducted following all prescribed burns to evaluate whether management objectives were met and if follow-up action is needed. This evaluation will include the inspection of control lines.
- □ All bladed firelines will be re-inspected periodically after burning to assure adequate erosion prevention. (Concern of Rabun County Coalition, 7/24/07). Follow-up dozer work and/or seeding and fertilizing will be used if this monitoring indicates the need.
- □ Fire Effects Monitoring Plots and photo- monitoring points (*FSH 5140*) have and will be documented on this burn for evaluating the pre- and post-burn effects. Two (2) randomly selected monitoring plots on this project area were established and measured on 8/23/2007 (see project file). (Concern GA Forest Watch 8/17/07).

### 8. ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

This decision is subject to appeal by those who provided substantive comments during the 30-day public review period. Written notice of appeal of this decision must be fully consistent with 36 CFR 214.14, "Content of an Appeal," including the reasons for appeal. Appeals must be postmarked or received within 45 days following the publication date of the legal notice of the decision in the Clayton Tribune in Clayton, Georgia. The appeal should be sent to: USDA Forest Service, Chattahoochee – Oconee National Forests, ATTN: Appeals Deciding Officer, 1755 Cleveland Highway, Gainesville, GA 30501.

#### 9. IMPLEMENTATION

This decision will not be implemented until at least 5 business days after the close of the appeal period, or 15 days after disposition of the last appeal, whichever comes later. It is expected this decision will be implemented starting with the 2008 growing season (approximately April – June 15<sup>th</sup>; September – October 15<sup>th</sup>).

# 10. CONTACT PERSON

For further information concerning this decision contact Wayne Herron by phone at (706) 782-3320 Ext 102, by letter at 809 Highway 441 South Clayton, GA 30525, or by e-mail at cwherron@fs.fed.us.

# 11. SIGNATURE AND DATE OF RESPONSIBLE OFFICIAL

David W. Jensen	October 31, 2007
David W. Jensen, District Ranger	Date